

1

1T1C 1 Transistor/1 Capacitor

3

3G Third Generation Wireless
3T 3-Transistor

$\Delta\Sigma$

$\Delta\Sigma$ Sigma-delta
 $\Delta\Sigma M$ Sigma-delta Modulator

A

A/D, ADC Analog-to-Digital Converter
AAC Advanced Audio Coding
ACI Adjacent Channel Interface
ACLR Adjacent Channel Leakage Power Ratio
ACPR Adjacent Channel Power Ratio
ADDLL All Digital Delay Locked Loop
ADSL Asynchronous Digital Subscriber line
AES Advanced Encryption Standard
AFC Automatic Frequency Control
AFE Analog Front End
AGC Automatic Gain Control
AGU Address Generation Unit
ALU Arithmetic Logic Unit
AM Amplitude Modulation
AMPS Advanced Mobile Phone Service
AMS Analog Mixed Signal
APD Avalanche Photo Diode
APG Algorithmic Pattern Generator
APSK Amplitude Phase-Shift Keying
ARM Advanced RISC Machine
ASIC Application-Specific Integrated Circuit
ASK Amplitude Shift Keying
ASP Advanced Simple Profile (MPEG-4 Video)
ATA Advanced Technology Attachment
ATD Address Transition Detection
ATE Automatic Test Equipment
ATM Asynchronous Transfer Mode
AVC Audio Visual CODEC
AWG Arrayed Waveguide Grating

B

BAW Bulk Acoustic Wave
BB Baseband
BBT Band to Band Tunneling
BCH Bose-Chaudhuri-Hocquenghem
(a type of error-correcting code)
BD Blu-ray disc
BER Bit Error Rate
BGA Ball-Grid Array
BGR Band Gap Reference
BiCMOS Bipolar Complementary MOS
BIOS Basic Input/Output System
BIST Built-in Self-Test
BJT Bipolar Junction Transistor
BL Bit Line
BOM bill of materials
BPF Bandpass Filter
BPSK Binary Phase Shift Keying
B-VOP Bidirectional Video Object Planes
BW Bandwidth

C

C4 Controlled-collapse chip connection
CAD Computer-Aided Design
CAM Content Addressable Memory
CAS Column Address Strobe
CCCS current-controlled current source
CCD Charge-coupled Device
CCK Complementary Code Keying
CCO Current-controlled oscillator
CCVS current-controlled voltage source
CDMA Code-Division Multiple Access
CDR Clock and Data Recovery
CDS correlated double sampling
CHE Channel Hot Electron Injection
CISC Complex Instruction Set Computer
CML Current-Mode Logic
CMOS Complementary MOS
CMRR Common-Mode Rejection Ratio
CMU Clock Multiplier Unit
CO Central Office
CODEC Coder-Decoder
COFDM Coded FDM
CPU Central Processing Unit
CPW Coplanar Waveguide
CRC Cyclic Redundancy Check
CSMA Carrier Sense Multiple Access
CT continuous time
CUI Command User Interface
CVD Chemical Vapor Deposition

D

D/A, DAC Digital-to-Analog Converter
DAB Digital Audio Broadcasting
dBFS dB relative to Full Scale
DBS Direct Broadcast Satellite
DCO Digitally Controlled Oscillator
DCT Discrete Cosine Transform
DCVS Differential cascode voltage switch
DCXO Digitally Controlled Crystal Oscillator
DDFS Direct-digital frequency synthesis (or synthesizer)
DDR Dual Data Rate
DDS Direct Digital Synthesis
DECT Digitally Enhanced Cordless Communication
DEM dynamic element matching
DEMOS Depletion MOS
DEMUX Demultiplexer
DES Data Encryption Standard
DFE Decision Feedback Equalizer
DFM Design for Manufacturability
DFT Design for Testability, Discrete Fourier Transform
DIMM Dual In Line Memory Module
DLL Delay-Locked Loop
DMA Direct Memory Access
DMB Digital Multimedia Broadcasting
DMOS (Double-)Diffused MOS
DNA Deoxyribonucleic Acid
DNL Differential Non-Linearity
DNR Dynamic Range (also DR)
DOM digital optical module
DR dynamic range (also DNR)
DRAM Dynamic Random-Access Memory
DRC Design Rule Check
DSL Digital Subscriber Line
DSP Digital Signal Processing
DSSS Direct Sequence Spread Spectrum
DT Discrete Time

DTL	Diode-Transistor Logic
DUT	Device Under Test
DVB	Digital Video Broadcasting
DVB-C	Digital Video Broadcasting Cable
DVB-H	Digital Video Broadcasting-Handhelds
DVB-S	Digital Video Broadcasting-Satellite
DVB-T	Digital Video Broadcasting-Terrestrial
DVD	Digital Video Disc
DVS	Dynamic Voltage Scaling
DWA	Data Weighted Averaging
DWDM	Dense Wavelength Division Multiplexing UTP: Unshielded Twisted Pair

E

ECC	Error-Correcting Code
ECG	Electro-cardiogram
ECL	Emitter-Coupled Logic
ECP	Emitter-Coupled Pair
EDGE	Enhanced Data rates for Global Evolution
EEG	Electro-encephalogram
EEPROM	Electrically Erasable Programmable Read-Only Memory
EFR	Enhanced Full Rate (GSM)
EIRP	Effective Isotropic Radiated Power
EIRP	Effective Isotropic Radiated Power
EMG	Electro-miogram
EMI	Electro Magnetic Interference
ENOB	Effective Number Of Bits
EOT	Electrical oxide thickness
EPROM	Erasable Programmable Read-Only Memory
ERBW	Effective Resolution Bandwidth
ESD	Electrostatic Discharge
EVM	Error Vector Magnitude

F

f_s	sampling frequency
f_t	transition frequency
FAMOS	Floating Gate Avalanche Injection MOS Transistor
FBAR	Film bulk acoustic resonator
FCC	Federal Communications Commission (U.S.)
FDMA	Frequency-Division Multiple Access
FDNR	Frequency Dependent Negative Resistor
FEC	Forward Error Checking
FeRAM	Ferro Electric Random Access Memory
FET	Field-effect transistor
FF	Flip Flop
FFE	Feed-Forward Equalizer
FFT	Fast Fourier Transform
FIB	Focused ion beam
FIFO	First In-First Out
FinFET	A MOSFET with the gate on two sides
FIR	Finite Impulse Response Filter
FLOTOX	Floating Gate Tunnel Oxide
FM	Frequency Modulation
FN	Fowler Nordheim
FO4	Fan-out of 4
FOM	Figure Of Merit
FPGA	Field-Programmable Gate Array
FPN	Fixed-pattern noise
FPU	Floating Point Unit
FSG	Fluorosilicate glass (dielectric)
FSG	Fluorine-doped Silicate Glass
FSK	Frequency Shift Keying
FSM	Finite State Machine

G

GBW	Gain-Bandwidth Product
GCA	Gain-Controlled Amplifier
GDDR	Graphics Double Data Rate RAM
GFSK	Gaussian Frequency-Shift Keying
GIDL	Gate Induced Drain Leakage
GMSK	Gaussian Minimum Shift Keying
GOPS	Giga-Operations Per Second
GPRS	General Packet Radio Service
GPS	Global Positioning System
GSM	Global Standard for Mobile Communication

H

HBT	Hetero-junction Bipolar Transistor
HCI	Host Controller Interface
HD	High Density
HD2,3	2nd- or 3rd-order harmonic distortion
HDL	Hardware Description Language
HDTV	High-Definition TeleVision
HiFi	High Fidelity
HPF	High-Pass Filter
HVCMOS	High Voltage Complementary MOS
HVMOS	High Voltage MOS

I

I/O	Input-Output
I/Q	In Phase and Quadrature
IBOC	In-band out of channel
IC	Integrated Circuit
IDE	Intelligent (or Integrated) Drive Electronics
IF	Intermediate Frequency
IIP2	Input-referred Second-order Intercept Point
IIP3	Input-referred Third-order Intercept Point
IIR	Infinite Impulse Response Filter
IMD	Inter-Modulation Distortion
IMX2,3	2nd- or 3rd-order intermodulation distortion
INL	Integral Non-Linearity
InP	Indium Phosphide
IP	Intellectual Property
IPSEC	Internet (Network) Protocol for Security
ISI	Inter Symbol Interference
ISM	Industrial, Scientific and Medicine Band

J

JPEG	Joint Photographic Expert Group
JTAG	Joint Test Automation Group

L

LAN	Local-Area Network
LCD	Liquid Crystal Display
LCOS	Liquid crystal on silicon
LDCMOS	Laterally Diffused Complementary Metal Oxide Silicon
LDMOS	Laterally Diffused Metal Oxide Silicon
LDO	Low drop-out
LDPC	Low-Density Parity Check
LED	Light Emitting Diode
LFCSP	LeadFrame Chip-Scale Package
LFSR	Linear Feedback Shift Register
LNA	Low-Noise Amplifier
LNB	Low-Noise Block
LO	Local Oscillator
LPCVD	Low-pressure chemical vapor deposition
LPF	Low-Pass Filter
LSB	Least Significant Bit

LSI	Large Scale Integration
LTPS	Low Temperature Poly Silicon
LVDS	Low Voltage Differential Signaling
LVS	Layout Verification to Schematic

M

MAC	Media Access Controller
MASH	Multi-stage noise shaping
MBOA	Multi-Band OFDM Alliance
MB-OFDM	Multi-Band OFDM
MCM	Multi-Chip Module
MCU	Micro Controller Unit
MEMS	Micro-Electro-Mechanical System
MIM	Metal-Insulator-Metal
MIMO	Multiple Inputs, Multiple Outputs
MIP	Million Instructions per Second
MLSE	Maximum Likelihood Sequence Estimation
MMIC	Monolithic Microwave Integrated Circuit
MODEM	Modulator-Demodulator
MOS	Metal-Oxide-Semiconductor
MOSFET	Metal-oxide-semiconductor FET
MOST	MOS Transistor
MP	Multi-processor
MPEG	Motion Picture Expert Group
MRAM	Magnetic Random Access Memory
MRAM	Magnetoresistive Random Access Memory
MRC	Maximum-ratio combining
MSB	Most Significant Bit
MTJ	Magnetic Tunnel Junction
MUX	Multiplexer

N

NF	Noise Figure
NMOS	n-channel MOS transistor
NMOST	NMOS transistor
NPN	Negative-Positive-Negative bipolar transistor
NRTZ	Non Return To Zero
NRZ	Non-Return to Zero (also NRTZ)
NTF	Noise Transfer Function
NVM	Non Volatile Memory
NVRAM	Non Volatile Random Access Memory

O

ODT	On-die Termination
OEM	Original Equipment Manufacturer
OFDM	Orthogonal Frequency Division Multiplexing
OIF	Optical Internetworking Forum
OIP2	Output-referred Second-order Intercept Point
OIP3	Output-referred Third-order Intercept Point
OLED	Organic LED
ONO	Oxide Nitride Oxide
OOK	On-Off Keying
OSR	Over-Sampling Ratio
OTA	Operational Trans-conductance Amplifier
OTP	One Time Programmable

P

P_{1dB}	1dB gain compression point
PA	Power Amplifier
PAE	Power Added Efficiency
PAM	Pulse Amplitude Modulation
PAN	Personal Area Network
PCB	Printed Circuit Board
PCI	Peripheral Component Interconnect
PCI-X	PCI Express

PCM	Pulse Code Modulation
PDA	Personal Data Assistant
PFD	Phase and Frequency Detector
PGA	Programmable Gain Amplifier
PHEMT	Pseudomorphic High-Electron-Mobility Transistor
PHY	Physical Layer
PLA	Programmable Logic Array
PLC	Power-Line Communication
PLD	Programmable Logic Device
PLL	Phase-Locked Loop
PMOS	p-channel MOS transistor
PMOST	PMOS transistor
PNP	Positive-Negative-Positive bipolar transistor
PON	Passive Optical Network
POTS	Plain Old Telephone Service
PPM	Pulse-Position Modulation
PR	Pseudo-Random or Partial Response
PRAM	Phase-change RAM
PRBS	Pseudo-Random Binary Sequence
PRML	Partial Response, Maximum Likelihood
PROM	Programmable Read-Only Memory
PSD	Power Spectral Density
PSK	Phase Shift Keying
PSNR	Peak SNR
PSRR	Power Supply Rejection Ratio
PTAT	Proportional to Absolute Temperature
PVD	Physical Vapor Deposition
PVT	Process, Voltage, Temperature
PWM	Pulse-Width Modulation

Q

QAM	Quadrature Amplitude Modulation
QDR	Quad Data Rate
QoS	Quality of Service
QPSK	Quadrature Phase Shift Keying
QVCO	Quadrature Voltage Controlled Oscillator
QVGA	Quarter Video Graphics Array

R

R/W	Read write
RAM	Random-Access Memory
RBW	Resolution bandwidth
RF	Radio Frequency
RFID	RF identification tag
RISC	Reduced Instruction Set Computer
rms	Root Mean Square
ROM	Read-Only Memory
RSA	A public-key cryptographic system, named after: Ron Rivest, Adi Shamir, and Leonard Adleman
RSSI	Received Signal Strength Indicator
RTL	Resistor-Transistor Logic
RTZ	Return To Zero
RX	Receiver
RZ	Return to Zero (also denoted by RTZ)

S

S/H	Sample-and-Hold
SAR	Successive-approximation register
SATA	Serial AT-Attachment
SC	Switched Capacitor
SCL	Source-Coupled Logic
SCP	Source-coupled pair
SCR	Silicon Controlled Rectifier
S-DMB	Satellite Digital Multimedia Broadcasting
SDRAM	Synchronous Dynamic Random-Access Memory
SEM	Scanning Electron Microscope

SER	Soft Error Rate
SER	Symbol Error Rate
SerDes	Serializer/Deserializer
SFDR	Spurious Free Dynamic Range
SFI	Serdes Framer Interface
SHA	Sample-and-Hold Amplifier
SiGe	Silicon Germanium
SILC	Stress Induced Leakage Current
SIMD	Single Instruction, Multiple Data
SIO	Synchronous I/O
SIP	Single Inline Package
SiP	System in a Package
SMP	Symmetric Multi-Processing
SNDR	Signal-to-Noise and Distortion Ratio
SNR	Signal-to-Noise Ratio
SoC	System on a Chip
SOI	Semiconductor on Insulator
SONET	Synchronous Optical Network
SONOS	Silicon-Oxide-Nitride-Oxide-Silicon
SOS	Silicon On Sapphire
SP	Simple profile
SPI	System Packet Interface
SPI	Serial Peripheral Interface
SRAM	Static Random-Access Memory
SSB	Single Side Band
SSO	Simultaneous switching output
SSTL	Stub Series Terminated Logic

T

T/H	Track and Hold
TC	Temperature Coefficient
TCAM	Ternary Content Addressable Memory
TCP	Transmission Control Protocol
TDDB	Time Dependent Dielectric Breakdown
TDMA	Time Division Multiple Access
TEM	Tunneling Electron Microscope
TFT	Thin-Film Transistor
THA	Track-and-Hold Amplifier
THD	Total Harmonic Distortion
THD+N	THD plus noise
TOPS	Tera Operations Per Second
TTL	Transistor-Transistor Logic
TV	Television
TX	Transmitter

U

UDTV	Ultra-High Definition Television
UHF	Ultra-High Frequency
UI	Unit Interval
UIPP	Unit Interval Peak-to-Peak
U-NII	Unlicensed National Information Infrastructure
UMTS	Universal Mobile Telecommunication System
UPROM	Unerasable Programmable Read Only Memory
USB	Universal Serial Bus
UWB	Ultra WideBand
UXGA	Ultra-Extended Graphics Array

V

VCCS	Voltage-Controlled Current Source
VCDL	Voltage-Controlled Delay Line
VCO	Voltage-Controlled Oscillator
VCSEL	Vertical Cavity Surface Emitting Laser
VCVS	Voltage-Controlled Voltage Source
VCXO	Voltage-Controlled Crystal Oscillator
VDMOS	Vertically diffused MOS
VGA	Variable-Gain Amplifier, Video Graphics Array

VLF	Very Low Frequency
VLIW	Very Long Instruction Word
VLSI	Very Large-Scale Integration
VSWR	Voltage Standing-Wave Ratio

W

WAN	Wide-Area Network
WCDMA	wideband Code-Division Multiple Access
WEP	Wired Equivalent Privacy
WiFi	Wireless Fidelity; an interoperability certification for WLAN products based on the IEEE 802.11 standard
WL	Word Line
WLAN	Wireless Local-Area Network

X

XAUI	10 Gigabit eXtended Attachment Unit Interface
XDR	Extreme Data Rate
XENPAK	XENPAK is a standard that defines a type of fiber-optic transceiver modules which are compatible with the 10 Gigabit Ethernet (10 GbE) standard.
XFP (format)	Indicates an increasingly popular format for optical transceiver modules at 10GB/s
XGA	Extended Graphics Array